Claims after this response:

1. (Original) A method for remotely controlling an instrument, comprising:

receiving at least one communication from each of at least two clients, wherein a first communication received from a first one of said at least two clients conforms to a first client specific protocol, a second communication received from a second one of said at least two clients conforms to a second client specific protocol, and said first client specific protocol being different from said second client specific protocol;

determining from which client each received communication was received;

determining an application resident on the instrument for which each received communication is intended, wherein at least one application is resident on the instrument; and

transferring each received communication to the application determined to be the application for which each received communication is intended.

2. (Original) The method as recited in claim 1, wherein the client specific protocol is the Standard Commands for Programmable Instrumentation (SCPI) protocol.

3. (Previously Presented) The method as recited in claim 1, wherein each communications from each client is interpreted into an interpreted command usable by the application for which each said communication is intended.

4. (Previously Presented) The method as recited in claim 1, further comprising:

separately for each of at least two intended clients, obtaining at least one additional communication from at least one application, wherein each obtained additional communication conforms to an application specific protocol;

determining from which application each obtained additional communication was obtained;

determining for which client each obtained additional communication is intended; and

transferring each obtained additional communication to the intended client, using the client specific protocol corresponding to that client.

5. (Original) The method as recited in claim 4, wherein the application specific protocol is the Standard Commands for Programmable Instrumentation (SCPI) protocol.

6. (Original) The method as recited in claim 4, wherein the obtained additional communications are modified to produce client messages which are in appropriate format for the client.

7. (Original) The method as recited in claim 4, wherein at least one obtained additional communication is in response to one of the communications received from one of the at least two clients, wherein the application tracks from which client the received communication originated, and wherein the application uses that tracking information to direct the at least one obtained additional communication to the client from which the received communication originated.

8. (Currently Amended) A computer readable memory device embodying a computer program of instructions executable by the computer to control an instrument, the instructions comprising:

receiving at least one communication from each of at least two clients, wherein a first communication received from a first one of said at least two clients conforms to a first client specific protocol, a second communication received from a second one of said at least two clients conforms to a second client specific protocol, and said first client specific protocol is different from said second client specific protocol;

determining from which client each received communication was received;

3

determining an application resident on the instrument for which each received communication is intended, wherein at least one application is resident on the instrument; and

transferring the received communication to the application determined to be the application for which each received communication is intended.

9. (Original) The computer readable memory device as recited in claim 8, wherein the client specific protocol is the Standard Commands for Programmable Instrumentation (SCPI) protocol.

10. (Currently Amended) The computer readable memory device as recited in claim 8, wherein each communication from each client is interpreted into an interpreted command usable by the application for which each said communication is intended.-

11. (Previously Presented) The computer readable memory device as recited in claim 8, the instructions further comprising:

separately for each of at least two intended clients, obtaining at least one additional communication from at least one application wherein each obtained additional communication conforms to an application specific protocol;

determining from which application each obtained additional communication was obtained;

determining for which client each obtained additional communication is intended; and

transferring each obtained additional communication to the intended client, using the client specific protocol corresponding to that client.

12. (Original) The computer readable memory device as recited in claim 11, wherein the application specific protocol is the Standard Commands for Programmable Instrumentation (SCPI) protocol.

13. (Original) The computer readable memory device as recited in claim 11, wherein the obtained additional communications are modified to produce client messages which are in appropriate format for the client.

14. (Original) The computer readable memory device as recited in claim 11, wherein at least one obtained additional communication is in response to one of the communications received from one of the at least two clients, wherein the application tracks from which client the received communication originated, and wherein the application uses that tracking information to direct the at least one obtained additional communication to the client from which the received communication originated.

15. (Original) An instrument, comprising:

at least two server logic modules, wherein each server logic module is configured to receive communications from separate client logic modules, wherein each received communication conforms to a client specific protocol of the client logic module from which the received communication was transmitted, and wherein each server logic module is configured to determine from which client the received communications were transmitted.

at least one interpreter logic module configured for formatting the received communications, wherein each server logic module is connected to and transfers its received communications to one of the interpreter logic modules and wherein each interpreter logic module is configured to format the received communications from the server logic modules to a format in which its intended application can respond; and

at least one application module resident on the instrument, wherein each server logic module is configured to determine for which application each received communication is intended, and wherein each interpreter logic module is configured to transfer the interpreter logic module formatted communications to the application determined to be the application for which each received communication is intended.

16. (Previously Presented) The instrument as recited in claim 15, wherein the interpreter logic module further comprises a parser logic module, wherein the parser logic

module is configured for parsing received communications, wherein each server logic module is connected to and transfers its received communications to one of the parser logic modules, and wherein each parser logic module is configured to parse the received communications from the server logic modules to which it is attached.

17. (Previously Presented) The instrument as recited in claim 16, wherein the interpreter logic module further comprises a stream wrapper and wherein the stream wrapper modifies the communication to place that communication in a format that is more usable by the application.

18. (Previously Presented) The instrument as recited in claim 16, wherein the interpreter logic module further comprises a semantics checker logic module and wherein the semantics checker logic module checks for the validity of various components of the communication.

19. (Original) The instrument as recited in claim 15, wherein the client specific protocol is the Standard Commands for Programmable Instrumentation (SCPI) protocol.

20. (Previously Presented) The instrument as recited in claim 16, wherein the application comprises a virtual instrument configured to receive the parsed received communications, wherein the application further comprises an application logic module configured to receive the parsed received communications from the virtual instrument, and wherein the application logic module is configured to perform actions in response to the parsed received communication.

21. (Previously Presented) The instrument as recited in claim 15, wherein one of the server logic modules is configured to send and receive communications via a connection selected from the group consisting of USB-488, a GPIB, and a IEEE 488 LAN.

22. (Original) The instrument as recited in claim 15, wherein each interpreter logic module is configured to receive communications from the application intended for the client associated with that interpreter logic module, to translate the communication received into an appropriate translated communicating having the client specific protocol for the associated

client, and to transfer that translated communication to the associated server logic module, wherein each server logic module is configured to receive communications from the interpreter logic module associated with that server logic module and to transmit the translated communications to the client associated with that server logic module, and wherein each server logic module which receives commands having client specific protocol the same as the application specific protocol of the intended application is configured to receive communications from that application and to transmit these communications to the client logic circuit associated with that server logic module.

23. (Original) The instrument recited in claim 22, wherein the application is configured to respond as appropriate to communications received from clients, wherein the application is configured to track from which client the received communication originated, and wherein the application is configured to use that tracking information to direct the response communication to the client from which the received communication originated.